

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the present application:

Listing of Claims:

1-11. (Cancelled).

12. (Previously presented) A receiver portion for selectively converting a GPS signal and a second RF signal to a lower frequency signal in a wireless handset, comprising:

a GPS control signal generator for generating a GPS control signal;

a band select switch connected to the GPS control signal generator for selecting the GPS signal or the second RF signal, responsive to the GPS control signal;

a mixer connected to the band select switch for receiving the selected signal and to a local oscillator for converting the selected signal to the lower frequency signal;

a GPS antenna for receiving the GPS signal;

a second RF signal antenna for receiving the second RF signal;

a GPS low noise amplifier connected to the GPS antenna and to the band select switch for amplifying the GPS signal;

a PCS low noise amplifier connected to the second RF signal antenna and to the band select switch for amplifying the second RF signal; and

a power supply connected to the GPS control signal generator for supplying power to the GPS low noise amplifier and to the PCS low noise amplifier, wherein:

the GPS control signal generator is connected:

to a power line of the GPS low noise amplifier for connecting the power supply to the GPS low noise amplifier when the GPS control signal is on and;

to a power line of the PCS low noise amplifier for connecting the power supply to the PCS low noise amplifier when the GPS control signal is off.

13. (Previously presented) The receiver portion of claim 12, further comprising:

a diplexer connected to the GPS antenna for isolating the GPS signal from the second RF signal.

14. (Previously presented) The receiver portion of claim 13, wherein the GPS antenna and the second RF signal antenna are the same antenna .

15. (Original) The receiver portion of claim 13, wherein the lower frequency signal is an IF signal.

16. (Original) The receiver portion of claim 13, wherein the second RF signal is a PCS signal.

17. (Cancelled).

18. (Original) The receiver portion of claim 15, wherein:
a low side injection of the local oscillator is used for mixing the GPS signal down to the IF signal.

19. (Original) The receiver portion of claim 13, wherein:
a oscillating frequency of the local oscillator is substantially equal to 1391
MHz.

20. (Previously presented) The receiver portion of claim 15,
wherein:
the second RF signal is a PCS signal; and
a high side injection of the local oscillator is used for mixing the PCS
signal down to the IF signal.

21. (Original) The receiver portion of claim 15, wherein:
the IF signal is substantially equal to 183.6 MHz.

22. (Previously presented) A receiver portion for converting an RF
signal to an intermediate frequency signal in a wireless communication device,
comprising:

- a GPS control signal generator for generating a GPS control signal;
- a diplexer for isolating a GPS signal from a second RF signal;
- a local oscillator for generating a local oscillator signal;
- a mixer, connected to the diplexer for receiving the GPS signal and the
second RF signal and to the local oscillator for receiving the local oscillator signal, for
converting the received signals into a lower frequency signal;
- a lower frequency filter connected to the mixer and constructed to transmit
a lower frequency signal that is indicative of a selected signal that is either the GPS
signal or the second RF signal;
- a GPS antenna for receiving the GPS signal;

a second RF signal antenna for receiving the second RF signal, wherein the second RF signal is a PCS signal; and

a GPS low noise amplifier connected to the GPS antenna and to the diplexer for amplifying the GPS signal;

a PCS low noise amplifier connected to the PCS antenna and to the diplexer for amplifying the PCS signal;

a power supply connected to the GPS control signal generator for supplying power to the GPS low noise amplifier and to the PCS low noise amplifier wherein:

the GPS control signal generator is connected to a power line of the GPS low noise amplifier and to a power line of the PCS low noise amplifier for connecting the power supply to the GPS low noise amplifier when the GPS control signal is on and for connecting the power supply to the PCS low noise amplifier when the GPS control signal is off.

23. (Previously presented) A receiver portion for converting a GPS signal and a second RF signal to an intermediate frequency (IF) signal comprising:

a GPS control signal generator for generating a GPS control signal;

a local oscillator configured to generate a GPS local oscillator signal and a second RF signal local oscillator signal wherein the GPS control signal generator is connected to the local oscillator for selecting either the second RF signal local oscillator signal or the GPS local oscillator signal;

a GPS antenna for receiving the GPS signal;

a second RF signal antenna for receiving the second RF signal;

a diplexer connected to the GPS antenna and to the second RF signal antenna and configured to transmit the GPS signal and the second RF signal;

a mixer connected to the local oscillator source and to the duplexer, the mixer constructed to convert the second RF signal to a first lower frequency signal and to convert the GPS signal to a second lower frequency signal;

a band pass filter connected to the mixer, the filter configured to transmit either the first lower frequency signal or the second lower frequency signal;

a GPS low noise amplifier connected to the GPS antenna and to the duplexer for amplifying the GPS signal;

a PCS low noise amplifier connected to the PCS antenna and to the duplexer for amplifying the PCS signal; and

a power supply connected to the GPS control signal generator for supplying power to the GPS low noise amplifier and to the PCS low noise amplifier wherein:

the GPS control signal generator is connected to a power line of the GPS low noise amplifier and to a power line of the PCS low noise amplifier for connecting the power supply to the GPS low noise amplifier when the GPS control signal is on and for connecting the power supply to the PCS low noise amplifier when the GPS control signal is off.

24. (Previously presented) The receiver portion of claim 23, wherein the GPS antenna and the second RF signal antenna are the same antenna .

25. (Cancelled).

26. (Original) The receiver portion of claim 23, wherein the second RF signal is a PCS signal.

27-28. (Cancelled).

29. (Previously presented) The receiver portion of claim 23, wherein a low side injection of the local oscillator is used for mixing the GPS signal down to the IF signal.

30. (Original) The receiver portion of claim 23, wherein an oscillating frequency of the local oscillator is substantially equal to 1391 MHz.

31. (Previously presented) The receiver portion of claim 23, wherein:
the second RF signal is a PCS signal, and;
a high side injection of the local oscillator is used for mixing the PCS signal down to the IF signal.

32. (Original) The receiver portion of claim 26, wherein the IF signal is substantially equal to 183.6 MHz.

33-37. (Cancelled).

38. (Previously presented) A receiver portion for receiving a GPS signal and a cellular CDMA signal comprising:

a GPS control signal generator for generating a GPS control signal;

a local oscillator configured to generate a GPS local oscillator signal and a cellular CDMA local oscillator signal wherein the GPS control signal generator is connected to the local oscillator for selecting either the cellular CDMA local oscillator signal or the GPS local oscillator signal;

a GPS antenna for receiving the GPS signal; and

a cellular CDMA antenna for receiving the cellular CDMA signal;

a first mixer connected to the local oscillator and to the GPS antenna, the first mixer constructed to convert the GPS signal to a first lower frequency signal, wherein the first lower frequency signal is a first IF signal;

a second mixer connected to the local oscillator and to the cellular CDMA antenna, the second mixer constructed to convert the GPS signal to a second lower frequency signal, wherein the second lower frequency signal is a second IF signal; and

a band pass filter connected to the first mixer and to the second mixer, the band pass filter configured to transmit either the first lower frequency signal or the second lower frequency signal and wherein a low side injection of the local oscillator is used for mixing the GPS signal down to the IF signal.

39. (Original) The receiver portion of claim 38, wherein an oscillating frequency of the local oscillator is substantially equal to 1391 MHz.

40. (Previously presented) A receiver portion for receiving a GPS signal and a cellular CDMA signal comprising:

a GPS control signal generator for generating a GPS control signal;

a local oscillator configured to generate a GPS local oscillator signal and a cellular CDMA local oscillator signal wherein the GPS control signal generator is connected to the local oscillator for selecting either the cellular CDMA local oscillator signal and the GPS local oscillator signal;

a GPS antenna for receiving the GPS signal;

a cellular CDMA antenna for receiving the cellular CDMA signal;

a first mixer connected to the local oscillator and to the GPS antenna, the first mixer constructed to convert the GPS signal to a first lower frequency signal, wherein the first lower frequency signal is a first IF signal;

a second mixer connected to the local oscillator and to the cellular CDMA antenna, the second mixer constructed to convert the cellular CDMA signal to a second lower frequency signal, wherein the first lower frequency signal is a second IF signal;

a band pass filter connected to the first mixer and to the second mixer, the band pass filter configured to transmit either the first lower frequency signal or the second lower frequency signal; and

a divide by two circuit connected between the local oscillator and the second mixer for dividing an initial local oscillator signal by two to produce a second local oscillator signal, and wherein a high side injection of the local oscillator is used for mixing the cellular CDMA signal down to the IF signal.

41. (Previously presented) The receiver portion of claim 40, wherein: the IF signal is substantially equal to 183.6 MHz.

42. (Cancelled).

43. (Previously presented) The receiver portion of claim 40, further comprising:

a diplexer connected between the GPS antenna and the first mixer for connecting the GPS signal to the first mixer.

44. (Previously presented) The receiver portion of claim 40, further comprising:

a duplexer connected between the GPS antenna and the first mixer for connecting the GPS signal to the first mixer.

45-48. (Cancelled).

49. (Previously presented) A receiver portion for receiving a GPS signal and a cellular CDMA signal comprising:

- a GPS control signal generator for generating a GPS control signal;

- a local oscillator configured to generate a GPS local oscillator signal and a cellular CDMA local oscillator signal wherein the GPS control signal generator is connected to the local oscillator for selecting either the cellular CDMA local oscillator signal or the GPS local oscillator signal;

- a GPS antenna for receiving the GPS signal;

- a cellular CDMA antenna for receiving the cellular CDMA signal;

- a first mixer connected to the local oscillator and to the GPS antenna, the first mixer constructed to convert the GPS signal to a first lower frequency signal, wherein the first lower frequency signal comprises a first IF signal;

- a second mixer connected to the local oscillator and to the cellular CDMA antenna, the second mixer constructed to convert the GPS signal to a second lower frequency signal, wherein the second lower frequency signal comprises a second IF signal;

- a band pass filter to the first mixer and to the second mixer, the band pass filter configured to transmit either the first lower frequency signal or the second lower frequency signal; and

- a divide by two circuit connected between the local oscillator and the second mixer for dividing an initial local oscillator signal by two to produce a second local oscillator signal wherein:

- a high side injection of the local oscillator is used for mixing the cellular CDMA signal down to the second IF signal.

50-69. (Cancelled).